MUNICIPAL SOLID WASTE LANDFILL
APPLICATION CONTENT CHECKLIST

I. Letter of Transmittal

[ ] A letter of transmittal to the Department.

II. Table of Contents

[ ] A table of contents listing the main sections of the application.

III. General Information

[ ] Name of the facility

[ ] General Description of the Facility Operation - The type and a general description of the solid waste facility operation.

[ ] Owner Information - All owner's names, addresses, and telephone numbers.

[ ] Operator Information - All operator's names, addresses, and phone numbers.

[ ] Agent Information - All names, addresses, and telephone numbers of any agents authorized to act on behalf of the applicant.

[ ] Facility Information

- [ ] The physical location of the facility;
- [ ] The mailing address of the facility;
- [ ] The legal description of the facility by township, range and section;
- [ ] The county assessor's book, map, and parcel number for the land on which the facility is located;
- [ ] Total acreage of the proposed facility;
- [ ] Population base served for calculation of initial annual registration fee (A.R.S. § 49-747.C);
- [ ] Major design features;
- [ ] Annual precipitation and evaporation rates;
- [ ] Local vegetation types and geographic characteristics of the facility;
- [ ] Prevailing wind speed and direction (wind rose or equivalent);
- [ ] Adjoining land uses;
- [ ] Drainage characteristics at the facility;
- [ ] An estimate of the life in years, fill size in acres, and capacity in tons of the proposed landfill; the application should include the rationale and method of calculation for each figure, and include an estimate of the volumes of daily, intermediate and final soil cover proposed;

[ ] For existing facilities, a brief history of the facility, including previous owners/operators, previous types of wastes received, and disposal areas delineated.

[ ] Location Map - At a scale of not over 1:62,500 that delineates and provides:
- [ ] Latitude and longitude;
- [ ] Directions to the proposed facility from a major existing roadway;
- [ ] The proposed service area;
- [ ] Location of the closest population centers; and,
- [ ] Transportation systems including highways, airports and railways.

[ ] Aerial Photograph - It is recommended that an aerial photograph of the site be submitted, showing at least a one-half mile radius around the facility.

[ ] Vicinity Map(s) - At a scale not over 1:24,000 that delineates:
- [ ] The area within one mile of the proposed facility boundaries;
- [ ] Adjacent zoning and land use (including residences) within one mile of the proposed facility boundaries;
- [ ] Access roads, bridges and railroads;
- [ ] Airports within 10,000 feet of the proposed facility boundaries;
- [ ] Floodplains within one-half mile of the proposed facility boundaries;
- [ ] Location of any surface water courses, wetlands and groundwater wells listed in public records or otherwise known to the applicant within one-half mile of the proposed facility boundaries;
- [ ] Established historic sites, registered by the State Historic Preservation Office, located within one mile of the proposed facility property boundaries; and
- [ ] Any other existing or proposed man-made, natural or other significant feature within one mile of the proposed facility boundaries.

[ ] Acknowledgments and Authorized Signature - Include statement or documentation to validate that to the best of the applicant's knowledge and belief:
- [ ] That the applicant and operator complied with all other applicable local regulations and ordinances relative to the construction and operation of the proposed facility;
- [ ] That the owner will grant site access to the operator as necessary to conduct any closure or post-closure care once the operation has ceased;
- [ ] That the application shall be signed by an authorized agent of the operator. The applicant shall certify that the information submitted in the application is true, accurate, and complete to the best of the applicant's knowledge and belief.

IV. Location Restrictions (Note: Demonstrations for compliance with the location restrictions shall include proper documentation from the appropriate regulatory agency. For the purpose of this section, "new solid waste landfill" includes lateral expansions to existing solid waste landfills.)

[ ] Irrigation Grandfathered Rights (A.R.S. § 49-772.A.1) - New solid waste facilities may

not be permitted if an irrigation grandfathered right is appurtenant to all or any part of the facility. The irrigation grandfathered rights may be retired through the Department of Water Resources.

[ ] Floodplains - > 25,000 cfs (A.R.S. § 49-772.A.2)[1] - No part of a facility seeking plan approval may be located within one half mile of a 100-year floodplain with flows in excess of 25,000 cfs.

[ ] Floodplains (40 CFR § 258.11) - If the landfill is located in a 100-year floodplain, it must not restrict the flow of a 100-year flood, reduce temporary storage capacity of the floodplain or result in washout of solid waste.

[ ] Airport Safety (40 CFR § 258.10) - The owner or operator of a new or existing solid waste landfill located within 10,000 feet of any airport runway end used by turbojet aircraft or 5,000 feet of any airport runway end used by only piston-type aircraft must demonstrate that the landfill is designed and operated so that it does not pose a bird hazard to aircraft. If located within a five mile radius of any airport runway end used by turbojet or piston-type aircraft, the affected airport and Federal Aviation Administration must be notified.

[ ] Wetlands (40 CFR § 258.12) - New solid waste landfills shall not be located in wetlands unless the owner or operator can demonstrate all of the following:

[ ] A practicable alternative site is not available;

[ ] The construction and operation will not cause, contribute to the violation of any applicable state water quality standard, toxic effluent standard or prohibition, or jeopardize endangered or threatened species or critical habitat;

[ ] The construction and operation will not cause or contribute to significant degradation of wetlands;

[ ] To the extent required under section 404 of the Clean Water Act or applicable state wetland laws, steps have been taken to attempt to achieve no net loss of wetlands by first avoiding impacts to wetlands to the maximum extent practicable through all appropriate and practicable compensatory mitigation actions.

[1] See A.R.S. § 49-772.A.2 for exceptions.

[ ] Fault Areas (40 CFR § 258.13) - New solid waste landfills shall not be located within 200 feet of a fault that has had displacement in "Holocene geologic time"(within the last 10,000 years) unless the owner or operator can demonstrate that an alternative setback distance will prevent damage to the structural integrity of the facility and will protect public health and the environment. Documentation showing the known Holocene faults nearest the facility may be used to demonstrate that the facility is greater than 200 feet away from a fault.

[ ] Seismic Zones (40 CFR § 258.14) - New solid waste landfills shall not be located in seismic impact zones unless the owner or operator can demonstrate that all containment structures, including liners, leachate collection systems and surface water control systems are designed to resist the maximum horizontal acceleration in lithified earth material for the site. To demonstrate that a facility is not located within a seismic impact zone, a reference map should be provided which delineates the nearest seismic impact zones and which clearly pinpoints the facility on the map.

[ ] Unstable Areas (40 CFR § 258.15) - New and existing solid waste landfills that are located in an unstable area, such as areas with fissures, mass movement, highly expansive soils, or karst terrain, must demonstrate that engineering measures have been incorporated into the facility design to ensure that the integrity of the structural components of the facility will not be disrupted, including at a minimum an analysis of the following:

[ ] On-site or local soil conditions that may result in significant expansion/collapse and/or differential settling;
[ ] On-site or local geologic or geomorphologic features;
[ ] On-site or local man-made surface or subsurface features or events.

V. Administrative Demonstrations

[ ] Financial Assurance Requirements (A.R.S. § 49-770) - Municipal solid waste landfills will be required to demonstrate financial assurance. (40 CFR § 258.71) "Financial Assurance For Closure" requires MSWLF owners or operators to obtain a detailed written estimate, in current dollars, based on the cost[2] of hiring a third party to conduct closure of the largest area of all MSWLF units open at any one time, plus the third party cost[2] for 30-years of post-closure activities for the entire facility. Available financial assurance mechanisms are listed in A.R.S. § 49-761.J.

[ ] Technical Capability - A demonstration that the operator of the solid waste facility is technically capable of constructing and operating the solid waste facility in accordance with the proposed plan. The demonstration shall be made by submitting all the following applicable information about persons responsible for construction or operation of the solid waste facility:

[ ] Pertinent professional licenses or certifications held.
[ ] Professional training relevant to the construction or operation of the solid waste

[2] These costs must be updated annually. See 40 CFR § 258.71(a)(2) and § 258.72(a)(2).

facility.

[ ] Work experience relevant to the design, construction, or operation of a solid waste facility.

[ ] Other Information

[ ] A copy of all land lease agreements for the area on which the landfill will be located.

[ ] If the applicant is not the owner of the land on which the solid waste landfill is or will be located, proof that a copy of the application or plan was sent to the owner.

[ ] A copy of either the certificate of disclosure required by A.R.S. § 49-109 or a written certification that such disclosure is not required.

[ ] If the applicant is a federal agency, state agency or political subdivision of the state, both of the following shall be submitted with the application: (A.C.C. R18-13-403.A.15)

[ ] A copy of the formal action taken by the local governing body approving the site in accordance with A.R.S. § 49-767.A.;

[ ] A certification statement and supportive documentation demonstrating compliance with the public notice and hearing requirements specified in A.R.S. § 49-767.

Supportive documentation shall include the following:

[ ] A copy of a notarized affidavit from the publishing newspaper, which includes the language and dates of the public notice;

[ ] A copy of the written list of names and addresses of the real property owners within the area described pursuant to A.R.S. § 49-767.C., provided by the County assessor and the Arizona Department of Revenue;

[ ] A copy of the posted notice and a statement certifying that the notice was posted pursuant to A.R.S. § 49-767.B.;

[ ] A copy of the written list of names and addresses of the governing body of any city, town, or unincorporated portion of any county that is located within the area described pursuant to A.R.S. § 49-767.E.

[ ] Restrictive Covenant (A.R.S. § 49-771) A restrictive covenant shall be placed on the disposal area of the facility before the director may grant plan approval for operation of a solid waste landfill. The restrictive covenant must be signed by the Director and all owners of the tract of land in which the solid waste landfill is located. Provide a copy of the restrictive covenant as recorded in the County Recorders Office to the Department within 60 days after execution. If the Director does not receive the copy within 60 days, the Director shall send written notice indicating the deficiency to the owners of the real property. If a certified copy of the recorded covenant is not received within 30 days of that written notice, the plan is deemed void.

VI. Other Approvals/Demonstrations - Photocopies of other regulatory approvals, permits, applications, or notifications which are required for the facility must be included in the application.

[ ] Archaeological Clearance (A.R.S. § 41-861 through 864) - An archeological review of the site shall be conducted in accordance with the State Historic Preservation Act. The Department will accept a letter of concurrence signed by the State Historic Preservation Officer as evidence of archeological clearance.

[ ] Zoning and/or Special Use Permits - A new solid waste landfill shall provide evidence of compliance with or the inapplicability of city, town, or county zoning ordinances (See A.R.S. § 49-762.03.B.).

[ ] Floodplain - (A.R.S. § 49-772) If the proposed facility is located in a floodplain, approval must be obtained from the Local Floodplain Administrator.

[ ] Drainage Diversion - If drainages are to be diverted, reduced or in any other way altered, approval must be obtained from the local authority with jurisdiction. Proper documentation of approvals from the federal, state, or local authorities is required. (See checklist item, 404 Permit, that follows.)

[ ] Well Drilling Registrations - A permit must be obtained from the Arizona Department of Water Resources for borings which encounter groundwater and for installation of groundwater monitor wells or piezometers.

[ ] Open Burn Permit (OBP) - An OBP obtained from the ADEQ Air Quality Division or delegated county is required for facilities planning to burn lumber, wood waste and paper. Pursuant to A.A.C. R18-13-312.1.d, burning of refuse is prohibited.

[ ] Presence of Endangered Plants and/or Species - A U.S. Fish and Wildlife Service clearance, and Arizona Game and Fish Department information request are required.

[ ] Section 404 Permit/ADEQ 401 Certification – At the present time there is confusion as to the role of the Corps of Engineers in the municipal landfill approval process. Please call the Plan Review Unit Manager at (602) 771-4122 to discuss current procedures.

[ ] NPDES Stormwater Permit - A National Pollutant Discharge Elimination System (NPDES) stormwater permit is required for all stormwater discharges from the facility into the waters of the United States. A copy of the signed Notice of Intent (NOI) to discharge from the facility is acceptable documentation. This EPA program has now been delegated to ADEQ. Call (602) 771-4428 for additional information.

[ ] New Source Performance Standards (NSPS) and Emission Guidelines (EG) - A statement acknowledging whether the facility is subject to New Source Performance Standards and Emission Guidelines for MSWLF as set forth in 40 CFR § 60, Subpart WWW and Subpart AAAA and, if applicable, the owners/operators will obtain permits from either the State or local air quality permit authority and maintain compliance with the Clean Air Act.

VII. **<u>Operating Criteria</u>** - The operation plan must describe the operational procedures necessary to reduce threats to public health and eliminate the possibility of releases. The operational plan must address day-to-day activities at the landfill as well as weekly, monthly, quarterly and yearly activities. A copy of the operational plan must be kept on-site and made available to all employees at all times. The plan of operational activities should include:

[ ] <u>Procedures for Excluding the Receipt of Hazardous Waste</u> - A description of the waste screening program, along with procedures utilized to prevent the receipt of hazardous waste. Municipal Solid Waste Landfills (MSWLF) are required to implement a program for detecting and preventing the disposal of regulated hazardous waste as defined by 40 CFR § 261, and Polychlorinated Biphenyls (PCB) which at a minimum includes the following:

- [ ] Random inspections of incoming loads;
- [ ] Records of any inspections;
- [ ] Training of facility personnel to recognize hazardous waste and PCB wastes;
- [ ] Notification if hazardous wastes are discovered at the facility.

[ ] <u>Procedures for Excluding the Receipt of Bulk or Noncontainerized Liquids</u> - The mixing of bulk liquid waste with refuse in a landfill cell is not permitted[3]. Liquid waste such as septic tank pumpings is required to be disposed of in lined evaporation ponds, in land spreading operations, or in other Department approved facilities.(40 CFR § 258.28)

[ ] <u>Disposal Methods</u> - The operation plan must describe how excavations will be performed, where filling will be commenced and its progression to each excavation, the actual placing of fill within each excavation and procedures for compaction and cover placement. The following should be included:

- [ ] Type of disposal facility (i.e., cell, trench or area);
- [ ] Standard details for typical cell, trench or area construction (i.e., length, width and height);
- [ ] Height of compacted refuse lifts (8-12 feet maximum for conventional equipment);
- [ ] Slope of working face (3 horizontal to 1 vertical maximum unless stability of steeper slopes can be demonstrated);
- [ ] Size of working face;
- [ ] Compaction procedures (maximum two foot layers of refuse before compaction in each 8-12 foot lift for conventional equipment). The waste and cover must be compacted separately;
- [ ] Procedures for applying daily cover (refer to 40 CFR § 258.21 for acceptable procedures);

[3] See 40 CFR § 258.28 for exceptions.

[ ] Request for alternate daily cover, if applicable. Applicant is required to demonstrate that the alternative material and thickness control disease, vectors, fires, odors, blowing litter, and scavenging without presenting a threat to human health and the environment (40 CFR § 258.21);

[ ] Adequate setback to allow equipment to maneuver for slope maintenance (50 feet recommended);

[ ] Include provisions for collecting and transporting surface water run-off away from refuse at the working face;

[ ] Daily, intermediate and final cover must be sloped (minimum 2%) to prevent ponding of water and have provisions for erosion protection;

[ ] Provisions for preventing vehicles depositing refuse from backing over the excavation edge (i.e., bumper block arrangement, spotters, etc.); and

[ ] For facilities which are disposing of refuse above natural grade the side slopes shall not exceed a 3:1 (horizontal to vertical) slope and benching (terraces) will be required at least every 25 feet of vertical rise unless stability of steeper slopes can be demonstrated.

[ ] Litter Control - The operation plan must include procedures for control of on and off-site trash and windblown litter, and describe personnel both temporary and permanent available for policing the area as well as scheduled times for these activities. (40 CFR § 258.21)

[ ] Dust Control - The operation plan must include procedures used to reduce dust generation – such as gravel packed roads and/or water truck availability and usage (refer to 40 CFR § 258.24(a) for additional requirements).

[ ] Disease Vector Control - The operation plan must include techniques that will, in combination with daily cover, minimize the disease vector population, such as shredding tires, predator or vermin reproductive controls and application of insecticide and rodenticides (refer to 40 CFR § 258.22 for additional requirements).

[ ] Explosive Gas Monitoring - The following explosive gas monitoring activities must be included in the facility plan (refer to 40 CFR § 258.23 explosive gas control requirements):

[ ] Type and frequency of landfill gas monitoring;

[ ] Action plan in response to gas level exceedances;

[ ] Any landfill gas monitoring required by the Clean Air Act, New Source Performance Standards and Emission Guidelines.

[ ] Odor Control - The operation plan should include techniques that will, in combination with daily cover minimize odor releases, such as immediate cover applied when dead animals, manure or odorous loads are received.

[ ] Fire Control - The operation plan must include procedures used for prevention of fires such as separate disposal trench for ashes, fire breaks between cells and lifts, monofilling

and no open burning at the facility. A description of on-site water availability, fire fighting equipment and employee training is needed (refer to 40 CFR § 258.24(b) for additional requirements).

[ ] Access Control - The operation plan must include provisions for all weather access roads to the fill area and plan for inclement weather operations (i.e., rain, snow and wind), and describe controls for restricting facility access (i.e., fences, berms, lockable gates, security guards, etc.) to prevent illegal disposal (refer to 40 CFR § 258.25 for additional requirements).

[ ] Personnel - In order to evaluate the proposed operation of this facility please provide a description of all personnel, job titles and duties for both permanent and temporary employees both required for proper facility operation and proposed in this application.

[ ] Equipment - In order to evaluate the proposed operation of this facility please list the the types of equipment available at the facility to insure proper operation of the facility for the tonnage of waste anticipated.

[ ] Recordkeeping Requirement - The operation plan should discuss recordkeeping details for training procedures, inspection reports, scale house, collection of fees, incoming waste streams, monitoring schedule and results, equipment maintenance, fires and any remedial activities as well as filling sequence. Blank forms proposed to be used for recordkeeping may be included with the facility plan. In addition, 40 CFR § 258.29 requires municipal solid waste landfills to record or maintain near the facility, unless an alternate location has been approved by the Director, the following documents:

- [ ] Location restrictions required under Subpart B, of 40 CFR § 258;
- [ ] Inspection records, training procedures, and notification requirements of 40 CFR § 258.20;
- [ ] Gas monitoring results, remediation plans, and notification requirements of 40 CFR § 258.23;
- [ ] Any MSWLF unit design documentation for placement of leachate or gas condensate in a MSWLF;
- [ ] Any demonstration, certification, finding, monitoring, testing, or analytical data required under subpart E, of 40 CFR § 258;
- [ ] Closure and post-closure care plans and any monitoring results, testing, or analytical data as required by 40 CFR §§ 258.60 and 258.61.;
- [ ] Any cost estimates and financial assurance documentation required for closure, post-closure, and remediation by subpart G, of 40 CFR § 258.70-74.
- [ ] Any information demonstrating compliance with the small community exemption as required by 40 CFR § 258.1(f)(2).

[ ] Signage - The operation plan should include a description and location of proposed signs to be installed at the facility, such as entrance signs, traffic directions, safety restricted areas, and perimeter warning signs.

[ ] Waste Characterization - In order to determine the proper operational activities required

at the facility, and the approvals you wish from this application, the types of waste accepted at the facility must be specified. If the facility is owned by a political subdivision and a solid waste is not to be accepted at the facility then the procedures for providing for disposal of that particular waste must be addressed. In all cases, the following waste types must be listed as either being an acceptable or unacceptable waste:

[ ] Household waste as defined in 40 CFR § 258.2;
[ ] Construction debris (from demolition and construction activities);
[ ] Green waste (grass, leaves, trees, etc.);
[ ] White goods or large appliances (refrigerators, stoves, etc.);
[ ] Automobiles (cars, trucks, equipment, etc.);
[ ] Tires;
[ ] Batteries;
[ ] Animal carcasses;
[ ] Asbestos (friable and/or non-friable);
[ ] Sewage sludge (from a wastewater treatment plant);
[ ] Septage (pumpings from septic tanks);
[ ] Special waste
[ ] Pesticide and other empty containers;
[ ] Industrial and commercial process waste (liquid and solid);
[ ] Medical waste as defined in A.R.S. § 49-701.20; and
[ ] Hazardous waste from households and conditional exempted small quantity generators.

Any special handling and segregating procedures for the above-listed incoming wastes must be addressed in the plan. Examples of special handling procedures include: a separate disposal area for dead animals with cover being applied immediately, separate area for separating and storage of appliances, separate area for shredding or processing green waste, shredding of tires prior to disposal in a monofill, requiring all medical waste to be in red bags marked as infectious waste before collection by the hauler, treatment of any liquid wastes, and proper handling of non-friable asbestos to prevent generation of friable conditions. All proposed solid waste storage areas, including areas for holding large appliances, tires, batteries, aluminum, or other solid waste, must be identified in the plan along with a discussion handling procedures.

[ ] Restricted Activities - The procedures used to restrict certain activities in the landfill must be addressed in the operation plan. The following are activities which are to be restricted at the landfill:

[ ] Salvaging (A.R.S. § 49-744) - An operator may permit salvaging, but such activities shall be supervised and strictly controlled;
[ ] Open burning - A facility shall not practice open burning unless an open burn permit has been issued through Department's Division of Air Quality or local air authority. (refer to 40 CFR §258.24(b) for federal restrictions); and
[ ] Set backs - A 50 foot buffer should surround the landfill. The setback area may be used for any facility structural component other than waste

disposal. No waste disposal may occur within 100 feet of an existing well, excluding monitor wells or piezometers, pursuant to DWR well location requirements of A.A.C. R12-15-818.

[ ] Contingency Plan - An operational contingency plan is recommended, but not required. Such a plan provides forethought into potential unforeseen circumstances which may occur at the facility. The contingency plan should provide for an organized, planned and coordinated, technically and financially feasible, course of action to be taken in responding to contingencies during the construction and operation of a landfill; and should address:

- [ ] Procedures for detecting and reporting of methane gas exceedances, and control of gas migration (refer to 40 CFR § 258.23);
- [ ] Unusual traffic conditions;
- [ ] Steps to be taken in the event of a fire at the facility, including the distance to the nearest fire department, how they will be notified in case of an emergency and the estimated response time;
- [ ] Actions to be taken with respect to personnel and user safety, including a discussion on employee first aid training, ambulance service availability and the distance to the nearest hospital. Communication with emergency services must be available at the facility (i.e., telephone, or CB Radio);
- [ ] Facility shutdown due to inclement weather or act of God;
- [ ] Equipment breakdown (describe backup equipment availability);
- [ ] Release of hazardous or toxic materials;
- [ ] Presence of leachate in leak detection or secondary leachate collection system;
- [ ] Tank or surface impoundment spills or leaks (including the removal of the waste and repair of the structures);
- [ ] List of emergency coordinators for the facility with their telephone numbers; and
- [ ] List of emergency equipment maintained on site, the physical location of the emergency equipment and an evacuation plan.

VIII. Design Criteria

[ ] Engineering Design Plans - Submittal of plan sheets drawn to a scale not over 1: 2,400, that are of sufficient detail so as to provide a clear understanding of the size of both structures and features, and are suitable for use during construction inspections. The plans shall include appropriate cross-sections and details to show orientation and geometry of facility structural components. The plans should include the following:

- [ ] P.E. Seal (See A.A.C. R4-30-304 for requirements)
- [ ] Original site topography;
- [ ] Existing, and proposed excavation grades that extend beyond the proposed facility boundaries; (contour intervals no greater than 2 feet if overall relief is less than 20 feet, and no greater than 5 feet if overall relief is greater than 20 feet)
- [ ] Orientation of the map (north arrow) and scale;
- [ ] Facility development or fill sequence plans;
- [ ] Existing and proposed soil borings and monitoring wells;
- [ ] Each liner system (refer to 40 CFR § 258.40 for design criteria)

- [ ] Stormwater run-off and run-on drainage control systems (refer to 40 CFR § 258.26 for design criteria);
- [ ] Flood control structures designed for a 100-year flood if located in a 100-year floodplain (refer to 40 CFR § 258.11);
- [ ] Critical grades and elevations of collection pipe inverts, drainage envelopes, manholes, cleanouts, valves, sumps and drainage blanket thicknesses;
- [ ] Final cover system (foundation layer, infiltration layer, erosion layer) (see 40 CFR § 258.60 for design criteria);
- [ ] Landfill gas management system, including, monitoring probe and well locations and design, new source performance standards and emissions guidelines gas control system, active or passive system components and design (see 40 CFR § 258.23 for design criteria);
- [ ] Cross-sections (liner system, final cover);
- [ ] Details (liner system, final cover, leachate collection and removal, drainage control structures, flood control structures, landfill gas monitoring and collection system).

[ ] Site Drawing

- [ ] Facility access points and traffic routing within and around the proposed facility (include existing, planned and future all-weather access roadways);
- [ ] All buildings, appurtenances, structures (including scales, recycling facilities, transfer facilities, inspection areas and employee and equipment cleanup areas), parking areas and utilities (both above and below ground) within the proposed facility boundaries;
- [ ] All fire breaks and buffer zones;
- [ ] Permanent fences, gates and litter control structures;
- [ ] Soil cover material, waste and material (including recyclables) stockpiling areas;
- [ ] Most recent waste footprint for existing facilities;
- [ ] Property lines, proposed boundary of the filling area(s) and proposed future expansion areas;
- [ ] Screening and/or landscaping used to provide noise reduction and reduce nuisances from the facility; and
- [ ] Evaporation ponds.

[ ] Design Specifications (for materials and installation/construction)

- [ ] P.E. Seal (See A.A.C. R4-30-304 for requirements);
- [ ] Earthwork specifications (foundation, liner, drainage, final cover, etc.);
- [ ] Synthetic liner specifications (foundation, liner, drainage, final cover, etc.);
- [ ] Geotextile specifications (foundation, liner, drainage, final cover, etc.);
- [ ] Geogrid, geonet or other synthetic drain material specifications;
- [ ] Geosynthetic clay liner material specifications.
- [ ] Pipe specifications (leachate collection, stormwater conveyance, etc.)
- [ ] Riprap, gabions, or other scour protection specifications
- [ ] Seeding, fertizilation, mulching, or other erosion prevention specifications

[ ] Engineering Report - The engineering report must contain a narrative discussion of all

relevant design features required for pollution control and monitoring requirements, such as but not limited to: liner features; drainage controls; gas monitoring systems; etc.

Where appropriate, these narrative discussions should be supported by calculations with references and engineering assumptions, a discussion of modeling techniques, justifications for modeling input parameters, and site specific information. Any information provided in appendices must be appropriately referenced.

[ ] Hydrologic calculations (include diagrams(s) of drainage area(s));
[ ] Hydraulic calculations;
[ ] Slope stability calculations (if in a seismic impact zone area or for steep slopes) and a statement of compliance with 40 CFR § 258.14 design demonstration;
[ ] Unstable areas (if in an unstable area) calculations, statement of compliance with 40 CFR § 258.15 design demonstration;
[ ] Methane collection system - calculations, design basis;
[ ] Calculations for leachate collection system maintaining < 30 cm depth.

[ ] Quality Assurance/Quality Control (QA/QC) Plan - The QA/QC Plan should address the construction of the proposed facility and how the actual construction will be verified to be as the design indicates. For each specific phase of construction, the QA/QC Plan should include:

[ ] A delineation of the responsibilities for the QA/QC management organization, including the chain of command of the QA/QC inspectors and contractors;
[ ] A description of the required level of experience and training for the contractor, the crew, and QA/QC inspectors for every phase of construction in sufficient detail to demonstrate that the installation methods and procedures will be properly implemented; and
[ ] A description of the QA/QC testing protocols for every major phase of construction, which includes:
    [ ] The frequency of inspections;
    [ ] Field testing requirements;
    [ ] Sampling for laboratory testing;
    [ ] Laboratory testing requirements;
    [ ] Laboratory and field inspection methods;
    [ ] The limits for test failure for each item tested; and
    [ ] A description of the corrective procedures to be used upon test failure.

[ ] Landscape Plan - A Landscape Plan is not required under 40 CFR § 258. If however, you are planning to retain some existing vegetation, and/or plant additional vegetation for ground cover, screening, and other purposes throughout the life of the landfill please describe.

[ ] Construction Report - Provisions should be made for submitting a construction certification report to the Department within 45 days after completion of landfill construction. If the landfill consists of individual cells, trenches, or areas, a certification report must be submitted for each individual cell, trench, or area constructed. The

construction certification report should include:

[ ] P.E. Seal (See A.A.C. R4-30-304 for requirements);
[ ] The information prepared in accordance with the application requirements;
[ ] All QA/QC testing conducted in accordance with the approved QA/QC Plan (including documentation of any failed test results);
[ ] Descriptions of procedures used to correct the improperly installed material and statements of all retesting performed; and
[ ] As-built drawings noting any deviation from the approved engineering plans including a narrative summarizing the daily reports from the project engineer and a series of color photographs of major project features;
[ ] Certification that construction was completed in conformance with approved plans & specifications.

[ ] Demonstration for Alternate Liner Designs, if Applicable (40 CFR § 258.40)

[ ] Hydrogeologic characteristics;
[ ] Climatic factors;
[ ] Physical and chemical characteristics of leachate;
[ ] Leakage from liner calculations;
[ ] Demonstration of compliance w/MCLs at the point of compliance.

[ ] Alternate Final Cover System, if Applicable (40 CFR § 258.60)

[ ] Calculations and demonstration for infiltration layer per 40 CFR § 258.60(b)(1);
[ ] Calculations and demonstration for erosion layer 40 CFR § 258.60(b)(2).

IX. Groundwater Monitoring Activities

[ ] Monitoring Activities (new and existing facilities) - In accordance with 40 CFR § 258, Subpart E, the plan must address groundwater monitoring activities, and shall include the following:

[ ] 40 CFR § 258.50: Request for exemption (if applicable);
[ ] 40 CFR § 258.51: Groundwater monitoring system;
[ ] 40 CFR § 258.53: Sampling and analysis requirements;
[ ] 40 CFR § 258.54: Detection monitoring program;
[ ] 40 CFR § 258.55: Assessment monitoring program.

The above information shall include scaled maps, diagrams, boring logs, tables, etc. Please refer to the specific regulation.

[ ] Monitoring Activities (existing facilities) - The following items shall be addressed if groundwater contamination has been caused by the facility:

[ ] 40 CFR § 258.56: Assessment of corrective measures;
[ ] 40 CFR § 258.57: Selection of remedy;

[ ] 40 CFR § 258.58: Implementation of the corrective action program.

[ ] Monitoring activities (surface impoundments) - In accordance with A.R.S. § 49-241.B.1, discharging facilities within the solid waste landfill boundary, such as surface impoundments, must complete an application for an individual Aquifer Protection Permit (APP). The APP will specify basic design and groundwater monitoring requirements. Applications for APP facilities at a MSWLF will be reviewed concurrently with the solid waste facility plan in the Solid Waste Section. APP ground water monitoring activities can be coordinated with those conducted under 40 CFR § 258, Subpart E.

X. Closure & Post-Closure

[ ] Closure and Post-Closure Care - The closure plan must describe the proposed procedures for applying final cover and contours to the facility. The post-closure plan must describe the future uses of the site(if known), include a proposed schedule and description of the routine maintenance and monitoring procedures to minimize any releases to the environment. The closure plan must comply with 40 CFR §258.60, and the post-closure plan must comply with 40 CFR § 258.61.

[ ] Applicability;
[ ] Closure schedule;
[ ] Closure plan;
[ ] Closure certification and land deed;
[ ] Post-closure plan;
[ ] Post-closure certification.

NOTE: Facility owners/operators who do not plan to conduct closure activities in the near future must provide minimal closure information, including:

[ ] Final closure elevations;
[ ] Conceptual storm water/erosion management system, including supporting calculations;
[ ] Conceptual QA/QC Plan for closure;
[ ] Estimated closure and post-closure costs (in conjunction with the financial assurance demonstration);
[ ] Conceptual final cover design and cross-sections.